

their natural fear of mankind, and trust themselves almost within his grasp—how they are taught their various devices for attracting man's attention and leading him to the spots where the bees have made their nests, are questions which, perpetually discussed amongst those who, although not scientific naturalists, have spent their lives observing nature, can never be answered or explained.

XXVIII.—*Notes of a Collecting-trip in the New Hebrides, the Solomon Islands, New Britain, and the Duke-of-York Islands.* By E. L. C. LAYARD. *With Remarks* by E. L. LAYARD, F.Z.S. &c.

AT the close of last year I was asked by Lieut. Richards, R.N., commanding H.M.S. 'Renard,' if I would like to go with him to the above-named islands, if, as was probable, he should be ordered there. Of course I would. I had seen the illustrations of the Rev. G. Brown's birds in the 'P. Z. S.,' and longed to see the birds themselves. In the beginning of last April I received a letter from Lieut. Richards, dated in Sydney, and saying he would very shortly arrive in Noumea and I must be ready. The first thing was to take my favourite collecting-gun to the French Government armoury and have the locks thoroughly overhauled and oiled. Then came the loading of cartridges, and getting together scalpels, arsenical soap, &c.; and on the 19th April we left Noumea, under orders to meet the commodore in Blanche Bay, New Britain, on the 25th May. The weather was very bad, and all the small craft had run for shelter into various little sheltered bays. Something has gone wrong with the usual south-east wind this year. It was at least two months late, and when it did blow, only came in heavy fitful squalls, lasting for four or five days, then succeeded by heavy rain and the north-west wind. It was continually raining during the whole of my excursion, though it was supposed to be the healthy and dry season. This abnormal weather had a curious effect upon the birds. They ought to have recovered from their moulting and have been in

full plumage by the end of April; but when I left New Britain, on the 11th September, some were still in full moult, covered with pin-feathers, though breeding. This, of course, had a bad effect on collecting. We arrived in Havannah Harbour, Sandwich Island, New Hebrides, after a bad passage of eight days, and stayed there nine. I at once left the 'Renard,' and went to the house of an old friend, Mr. Glisson, on the other side of the island, to hunt the "Malou" (*Megapodius layardi*), where I had procured it before, nearly three years ago. For five days I searched the forest in vain; it rained the whole time, and I only succeeded in catching a very bad attack of fever and ague and getting one Malou egg (since broken). This fever weakened me very much during the whole cruise, and prevented me skinning any thing during the day and a half we lay in Mahira Harbour, San Christoval Island, Solomons, where I had my severe attack; and though my last actual fever fit was on the 24th May, I am still suffering from the effects.

The birds I got in Havannah Harbour were:—

HALCYON CHLORIS (Bodd.).

Female, moulting, in bush along shore.

GLYCYPHILA FLAVOTINCTA, G. R. Gr.

As usual, among the blossoms of a species of *Hibiscus*, all along the sea-beach.

CLYTORHYNCHUS PACHYCEPHALOIDES, Elliot.

I obtained one specimen only of this extremely rare bird, and the only one I have yet seen in the New Hebrides, in a deep dark ravine, while hunting for *Megapodius*. It is exactly the same as the New-Caledonian bird, apparently with the same habits. I whistled the bird to me from almost a quarter of a mile distance. [I suspect that a *Myiolestes* which Mr. Ramsay informed me some months since he had described from the New Hebrides is this species. I have not his description to refer to.—E. L. L.]

PTILOPUS CORREI, Ramsay.

I again found this green Dove in the place frequented by it during my last visit.

MACROPYGIA RUFa, Ramsay.

[We still hold to our opinion that this bird is the *Columba ferruginea* of Forster, described from Tanna; it is so very common among the New Hebrides, that it could not possibly have escaped notice. So also with the former species.—E. L. L.]

TRICHOGLOSSUS PALMARUM (Forst.).

At last I procured three specimens of this rare Parrakeet, which I only saw on my last visit. It frequents the cocoanut-trees, feeding on the blossoms, and, if commoner, would be very destructive to the cocoanut-crop. It is not only rare, but exceedingly wary and difficult to get.

LALAGE BANKSIANA, G. R. Gray.

I had the pleasure of having a good look at one of these lovely little birds. As I was sitting in a dense thicket of *Hibiscus*, under a cocoanut-tree, waiting for *Trichoglossi*, a full-plumaged bird perched within a yard and stared at me. Of course, at such a distance, I could not fire; and though I sat perfectly quiet, he flew off and disappeared in the bush.

I saw all the other birds procured or noticed in my last voyage (*cf.* Ibis, 1878, p. 267).

[PORPHYRIO VITIENSIS, Peale.

A singularly small delicately formed race of this bird, or a species hardly separable from it, has been sent us from Vate Island, New Hebrides. It differs also slightly in coloration, being only faintly tinged with light blue on the neck and chest, the prevailing tint being dark blue, as on the body. We give the dimensions of the bird in the flesh (as it was sent to us alive), compared with the New-Caledonian bird:—

	Vate bird.	New-Caledonian.
	in. lin.	in. lin.
Length	14 0	17 0
Wing	9 0	10½ 0
Tail	2 9	4 0
Tarse	3 1	3 7
Middle toe	3 7	4 4
Bill to end of cere	2 5	2 7

The cere in the Vate bird extends further back over the eye than in the New-Caledonian ; perhaps in the latter it is contracted more in drying. The Vate bird is close to the Samoan species, and I believe them all to be simply races of *P. vitiensis* of Peale.—E. L. L.]

From Havannah Harbour we steered straight across to San Christoval, one of the Solomon islands, and anchored in Mahira Harbour, after a wretched passage, diversified by fierce squalls, calms, intense heat, and attacks of fever. We arrived at midday, and I went ashore at once. Directly I landed I shot a pair of *Lorius chlorocercus* out of a cocoanut-tree ; then an example of *Rhipidura rubrofrontata*, displaying the usual fan-like tail-action of all the genus. I saw a black *Myzomela* flying about, but did not procure it ; this bird has been sent home by Lieut. Richards*. A fine species of *Ptilopus* was very common. I was just raising my gun to fire at a beauty, when my head suddenly became so giddy, that I was obliged to sit down and remain quiet till I recovered. I then came back to the beach, abandoning my shooting. It was a very sudden and bad attack of fever ! Waiting for the boat, I noticed a white-bellied Flycatcher flirting his tail on the top of "King Tye's" canoe-house. I collected enough strength to hold the little gun straight, and found it was *Sauloprocta melaleuca*. When I got on board I tried to skin the half dozen birds I had, but could not, and was obliged to go to bed instead ! Next day also I was too unwell to handle a gun, and could only skin several different kinds of Parrots, a *Dendrochelidon*, and other birds that Lieut. Richards and the boatswain brought on board. The day after (22nd May) we set sail for New Britain, and anchored in Blanche Bay during the first week in June. Blanche Bay is a splendid harbour, about fifteen miles in length, measuring from Gazelle Point to the head of the bay. This side, the southern, for the greater part of its length, rises with a gentle slope towards the great central chain of mountains, and is a waving mass of cocoanut- and

* [See Ibis, 1879, p. 439.—EDD.]

banana-trees as far inland as we could distinguish. The head of the bay is formed by a semicircle of steep hills, rising right out of the water for some 600 feet. They are scored by steep ravines, with knife-like edges between them; and the amount of climbing to be done in a morning's shooting is a thing to be remembered. The northern arm of the bay is formed by three apparently extinct volcanos, known as the "Mother" and the "North" and "South Daughters." The "North Daughter" had all the forest burnt off its slopes at the beginning of 1878, by the sudden upheaval of a new volcano close to the sea. Between the "South Daughter" and the "Mother" is a low range of hills, the sides furrowed by deep ravines and clothed with thick forest. From the base of that range of hills to the sea is a flat plain, with a breadth of about two miles in its widest part, covered with long coarse grass, and interspersed with groves of forest trees. The tree-covered ravines and the grassy plain were my hunting-grounds for the most of our six weeks' stay in Blanche Bay. Lieut. Richards surveyed the Duke-of-York archipelago, finding twelve islands and three harbours, instead of one island and one harbour, as laid down in the ordinary chart. Of course I was out shooting every day that the weather permitted. We also went to Ferguson's Bay (subsequently misnamed "Port Webber" by the Germans) to chastise some pirates who had plundered a wrecked English vessel. I got some birds there also. Most of the species in my collection are common both to New Britain and Duke-of-York group; those we did not procure in both places I will particularize.

HALIASTUR LEUCOSTERNUS, Gould.

Found in the Solomon Islands also. I found a pair breeding on the topmost dead branch of an enormous bread-fruit tree, but the natives would not climb up for me.

ASTUR ETORQUES, Salvad.

Not common. Found a nest with female sitting, after the male had been shot by the boatswain; but the natives would not get it.

CALORNIS CANTOR (Gm.).

This short-tailed Starling is much commoner in New Britain than on the Duke-of-York Island. It nests only in rotten cocoanut-trees, one pair to a tree. When a cocoanut-tree dies the crown falls off first, the top of the stem decays down the centre, and in the hole thus formed the Starlings nest. The trunks were always so rotten before the nests were made in them, that even the little native boys would not climb them, though offered large rewards in pipes and tobacco; and I never saw an egg of this species.

CALORNIS METALLICA (Temm.).

The Long-tailed Starling is much commoner on the Duke-of-York Island than in New Britain. It nests in large colonies, each pair having a separate nest, big enough to fill an ordinary-sized bucket. There are hundreds of these nests on one tree, and the more isolated and conspicuous the tree is, the better they appear to like it. I induced some natives to make a bamboo ladder, and very soon had some of the eggs. They were nearly all hatched out by the end of August. The ground-colour is greenish white, more or less pale, spotted and blotched throughout with dark reddish brown and purple. These markings are often crowded together at the obtuse end. In some specimens they are confined to that end only; indeed, in the large series before us, these markings, in shape and size, differ considerably. The same may be said of the sizes of the eggs themselves; but a good average one is, axis 1" 2^{'''}, diam. 9^{'''}.

GRACULA KREFFTI, Scl.*GRAUCALUS LINEATUS*.

New Britain: not seen on the Duke-of-York Island during our visit.

LALAGE KARU, Less.

Common wherever we went.

MONARCHA VERTICALIS, Sclater, P. Z. S. 1877, p. 99.

This beautiful Flycatcher is found only on the main island, Duke-of-York group, and on none of the other islands composing the archipelago. It builds a lovely little cup-shaped

nest, composed of fibres and lichens, covered over with cobwebs, and placed in the branching head of some young sapling, about five feet from the ground, in the densest and gloomiest part of the forest. The eggs are two in number, ground-colour pale pink, spotted throughout with small spots of the same colour, only darker, which coalesce and form a broad dark ring near the largest diameter; axis $11'''$, diam. $8'''$. These eggs I took myself.

MONARCHA RUFOCASTANEA, Ramsay.

One specimen obtained in the Solomon Islands.

MONARCHA ALECTO (Temm.).

Nests obtained on Duke-of-York Island during August; they are built on the same principle as those of *M. verticalis*, but of coarser materials. The eggs are two in number, and those from different nests vary considerably. Some are pale green, sparsely spotted with dark and light purple, in the form of a ring, at the greatest diameter, with only a straggling spot here and there on the rest of the surface; others are dull white, with the circle of spots dull and confused, as if "smudged." It is right that I should state that I never actually took the eggs with my own hands; those I obtained were brought in by the natives.

SAULOPROCTA MELALEUCA (Q. et G.).

One nest only of this common bird was found by Lieut. Richards, on the bare dead branch of a submerged tree that had fallen into the sea. It was of the usual cup-shape, and contained two eggs, of a warm cream-colour, tinged with brown, spotted, chiefly in a ring, at the largest diameter, with irregular indistinct purple and brown dots and blotches; axis $10'''$, diam. $7\frac{1}{2}'''$.

RHIPIDURA SETOSA.

Nesting in August, but I could not find any eggs.

PACHYCEPHALA MELANURA.

One specimen only, from Blanche Bay; but it is very common on the two islands of the Duke-of-York group that lay nearest to that place. One of these islands is not an acre in extent, with one tree in the centre of it, and the rest all

scrub. Separated from it by a deep-water channel, about one hundred yards across, lies the island of "Palakura"*. This is a somewhat larger island, long and narrow, not more than a mile at its greatest length. These two small patches of upheaved coral are completely swarming with birds, especially Pigeons. When one of the rare trading-vessels is anchored anywhere within ten miles, they send a boat's crew "gunning" on Sunday morning, and the men never come back with less than a hundred big Pigeons. The small island was strewn with broken fragments of the eggs of the two large Pigeons (*Carpophaga vanwycki* and *C. rubricera*) and of the Heron (*Ardea sacra*), sucked by rats and iguanas. Though the other ten islands of the archipelago are all closely adjoining, none of us saw a "Yellow-belly" anywhere else, except my own solitary specimen from Blanche Bay.

DICRURUS LÆMOSTICTUS, Scl.

This scarce and very wary Drongo is, as far as I saw, only found in the dense dark forests that clothe the steep ravines down the mountain-sides. Its quick shrill note is heard a long distance.

CISTICOLA RUFICEPS, Gould.

This little bird is only found in the long grass on the level land between the sea and the hills.

PHILEMON COCKERELLI, Scl.

Native name "Akou;" very abundant in New Britain.

CORVUS ORRU.

A difficult bird to approach.

DONACICOLA SPECTABILIS, Scl.

This little Finch was found only in Blanche Bay. It was in large flocks, diligently hunting for grass-seeds on the ground in the banana- and cocoanut-plantations. Very easy to approach. I killed seven at one shot.

NECTARINIA ASPASIA.

This lively bird is very common, though in the height of the breeding-season, July and August, I could not find any

* See P. Z. S. 1879, p. 446 *et seqq.* as to the birds obtained by Mr. Brown on this island.

eggs. The nest is the usual dome-shaped structure of soft vegetable matter and cobwebs, hanging on a bare branch or small stick, sometimes close to the ground.

NECTARINIA FRENATA.

Observed in New Britain only. The eggs, two in a nest, are of a pale grey-brown, indistinctly mottled, very closely at the obtuse end, with a darker shade of brown; axis $7\frac{1}{2}'''$, diam. $6'''$.

HIRUNDO TAHITICA.

Scarce. I found one nest on a ledge under an overhanging rock, made, as usual, of mud, the depression lined with feathers. This was during the last week in August, and the three eggs were just on the point of hatching. They are of a very pale pink ground-colour, generally spotted throughout with brown-madder spots, which run very thickly together, and form a ring at the greatest diameter. The only specimens procured are all more or less damaged in extracting the embryos, but measure about, axis $10'''$, diam. $6\frac{1}{2}'''$.

COLLOCALIA CINEREA.

The common Swift of these seas; found throughout the New Hebrides, Solomon Islands, Duke-of-York group, and New Britain.

DENDROCHELIDON MYSTACEA.

Fond of perching on high dead branches of trees; interspersed over the grass-country. The young, in a curious mottled white and brown plumage, were flying about during August.

CAPRIMULGUS MACRURUS.

Procured in Blanche Bay. None seen on the Duke-of-York Island. Lieut. Richards shot two species of Owls in Blanche Bay; but Mr. Brown's two native hunters and taxidermists assured me that neither Owls nor *Caprimulgidae* were found in Duke-of-York Island, though common in New Ireland and New Britain.

HALCYON ALBICILLA.

We did not find this handsome bird in New Britain, with

its sandy beaches. Its habitats are the bold rocky shores overhanging the surging waves in the Duke-of-York archipelago. It was in full breeding during August, but I could not find a nest. Native name "Ki-ki-outam." Food entirely fish.

HALCYON SANCTUS, Vig. & Horsf.

Found on the sea-beaches and marshes only. Another *Halcyon*, much larger, we got only in the thick parts about the mountain-slopes; we *never* observed it mixing among its smaller brethren on the open shore. Their habitats being so different, their food was different also. The large one ate beetles, locusts, and small lizards, and the lesser one contented himself with fish and sea-worms. Native name for both "Akiki."

[This "larger *Halcyon*," I was pleased to find, is identical with a bird from the Solomon Islands which I have named *H. tristrami**. L. L. was unaware of my having done this, and his independent observation on the differences of their habits and localities are confirmatory of my view of their distinctness.—E. L. L.]

TANYSIPTERA NIGRICEPS, Scl.

From Duke-of-York archipelago. Lives in the dense forest, and is very shy and difficult to approach. I shot one (a male) in a tall tree, and my native pointed me out a deserted ants' nest, about 25 feet from the ground, with a small hole just visible in it. Of course a promise of "'baccy" sent him up the tree; but unluckily there were no eggs. The ants' nest was a round mass, a yard in circumference, of rotten wood and earth. The Kingfisher appeared to have hollowed out a little tunnel communicating with a chamber. The native assured me that the bird sat in this chamber, with its long tail lying along the tunnel. He told me the eggs were two in number and quite white, and promised to get me some, but did not. This was in August. Native name "Gea Gea."

ALCEDO MOLUCCENSIS, Blyth.

Found on the sea-shore only.

* [Mr. Layard's description of this species does not appear to have been yet published; but Canon Tristram has received an example of the bird, and believes it to be a good species.—EDD.]

CHALCITES LUCIDUS.

Common in New Britain.

CACOMANTIS INSPERATUS (Gould).

Both islands.

CENTROPUS ATERALBUS, Less.

New Britain only. Our boatswain said it was excellent eating, and always shot them. I preferred Pigeons.

CENTROPUS VIOLACEUS, Q. et G.

Two specimens from Gazelle Point, one from Ferguson's Bay. Found in New Ireland also, but not on the Duke-of-York Islands.

EUDYNAMIS TAHITENSIS, Lath.

The only specimen seen during the whole cruise I procured on the Duke-of-York Island, close to Mr. Brown's house. [Extends down the New Hebrides to New Caledonia.—E. L. L.]

EUDYNAMIS PICATUS, Müll.

Both islands.

SCYTHROPS NOVÆ-HOLLANDIÆ.

One specimen from Blanche Bay ; commoner on the Duke-of-York Island.

EURYSTOMUS CRASSIROSTRIS, Scl.

Feeds on beetles.

MEROPS ORNATUS.

New Britain ; none seen on the Duke-of-York Islands.

CACATUA OPHTHALMICA, Scl.

Very common in New Britain, and makes capital soup. The natives keep many tame ones ; name "Tui Tui."

LORIUS HYPÆNOCHROUS, Gray.

Obtained from New Britain only.

TRICHOGLOSSUS MASSENÆ, Bp.

We have this bird from New Caledonia, Loyalty Islands, New Hebrides, Solomons, New Britain, and New Ireland ; none were seen on Duke-of-York Island.

TRICHOGLOSSUS SUBPLACENS, *Scl.*

This lovely Parrakeet confined itself entirely to the cocoa-nut-blossoms.

NASITERNA PUSIO, *Scl.*

Creeps, like a Nuthatch or European Creeper, round the tree-trunks, in small parties; very fearless; feeds mostly on the seeds of parasitic plants.

ECLECTUS POLYCHLORUS, *Scop.*

Very common; good eating. A native brought me two fresh eggs, showing me the parent birds, and pointing out a hole in a big tree-stem, where a rotten branch had fallen off, as the entrance of the nest he had just robbed. The eggs are pure white, but apparently much soiled, either by the débris of rotten wood or by the parent bird. Axis $1'' 6'''$, diam. $1'' 3'''$, blunt at the smaller end. The red and blue birds are females, the green ones the males.

CARPOPHAGA SPILORRHOA, *G. R. Gray.*

I procured three specimens of this bird in Ferguson's Bay; Lieut. Richards shot another; these were the only examples we saw of this fine species. It did not appear to be at all wary in its habits. I got a pair at my first shot, and while admiring their elegance, another bird pitched in the same place, and was quickly placed beside the first two. Richards shot his from the same tree directly afterwards, making two pairs. The white traders told me the birds were found nowhere else.

CARPOPHAGA VANWYCKI, *Cassin.*

Much commoner about the Duke-of-York Islands than in New Britain. In perfect swarms on "Palakura" and the smaller Pigeon island.

CARPOPHAGA RUBRICERA, *G. R. Gray.*

Multitudes in Blanche Bay. We used to feed the whole of the 'Renard's' crew on them. An egg, said to belong to this species, was brought by a native, who identified it on seeing a skin. It is of a pure shining white, similarly shaped at each end. Axis $1'' 10\frac{1}{2}'''$, diam. $1'' 5'''$.

CALENAS NICOBARICA (Linn.).

Obtained on the Duke-of-York archipelago. It lives in dense thickets, scratching on the ground among ferns and brambles, but taking to the tops of the highest trees on the slightest alarm. The white tail is very conspicuous as the bird rises out of the dark undergrowth.

MACROPYGIA BROWNI, Schl.

I only saw one live pair of this very rare Pigeon during all my excursions, on the main Duke-of-York Island. One wretchedly dirty specimen was brought to me by a native, floating in salt water at the bottom of his canoe; but Lieut. Richards was fortunate enough to see, and kill, a lovely pair while surveying a lonely part of the island.

MACROPYGIA CARTERETIA, Bp.

Lives in dense bush, and is very wary.

PTILOPUS INSOLITUS, Schleg.

I wasted many hours in New Britain hunting after the few individuals of this species. When we arrived at the Duke-of-York Island we found the banian-trees crowded with them, and had many an excellent pie in consequence!

PTILOPUS SUPERBUS, Temm.

Wary and somewhat scarce.

SYNÆCUS AUSTRALIS (Lath.).*

We found this little Quail living in the long grass in Blanche Bay. If we had had a good pointer we might have had finesport.

TURNIX MELANOTUS (Gould).

Found mostly in the "sweet-potatoe" plantations on Mioko Island, Duke-of-York group. Eggs brought by natives, and identified by them upon seeing the skins, are olive-brown, minutely speckled throughout with tiny black or dark brown pin-point spots; sometimes these coalesce and form unequal patches and smudges. In shape these eggs are usually sharp-pointed at the small end; the greatest diameter is near the middle, the other end is very obtuse; axis $12'''$, diam. $9\frac{1}{2}'''$.

* [This is no doubt Hartlaub's *Excalfactoria lepidæ*. See Ibis 1880, p. 135.—EDD.]

CASUARIUS BENNETTI.

In Ferguson's Bay I was close to one, and its note reminded me of an asthmatic old man. The boatswain was the only one of us to catch a glimpse of this noble bird. The proper native pronunciation of the name has a *p*, not *k*, at the end of the word. It is "Moorup," not "Mooruk." I found the contents of the eggs made capital omelettes, though my two messmates could not be induced to touch them, and I had the advantage of keeping the shells. The price of an egg was a fourpenny knife. We had a tribe of natives engaged to make a regular country hunt for us after "Moorups" and kangaroos. They enclose a great extent of the grass-country and set fire to it all round, leaving only a narrow opening, through which the frightened birds dash, exposed to the spears of the hunters. The 'Danac' arrived with the 'Renard's' sailing-orders just before our projected hunt was to take place, and so we missed it.

MEGAPODIUS EREMITA, Hartl.

This bird is a perfect nuisance in Blanche Bay, the whole place, both on the grassy flats and the bush-covered hill-sides, being so undermined with its nesting-holes, that we were continually stumbling into them, notwithstanding all our care in walking. Like domestic fowls, they lay indiscriminately in each other's nests. Some of these are regular excavations, six or seven feet deep. Going shooting one day, I saw two flat white things moving in the mouth of a small cavern by the side of the road. Upon closer inspection they proved to be the upturned soles of a native's feet, their owner being head downwards, nearly six feet underground. He presently emerged with five eggs, which I purchased on the spot for a penny stick of tobacco. The consumption of eggs by the 'Renard's' thirty men was something enormous, the price alongside being six eggs for one stick of tobacco. The birds were very numerous, and when flushed took to the trees. From what the natives and white traders told me, I think they breed all the year round. I was there three months, and the quantity of eggs was practically

unlimited the whole time. The birds are very good eating, both roasted or as soup.

One day I made some natives guide me to a place up the mountains which they told me was an especial breeding-place. They led me a dreadful tramp ! climbing up and down almost perpendicular ravines, where I had to swarm up banian-tree roots like a monkey. At length, just as I was about giving up the hunt, they brought me to a steep ravine, thickly covered with dense bushes on both sides. This ravine was terminated by a huge wall of rock, under which was an open space of about twenty square yards, all of small round volcanic pebbles. This place bore evident signs of being continually dug over, and my natives got a dozen eggs from among the pebbles without any loss of time. How they escaped being broken when they were covered up, I cannot make out, as the shells are so thin they invariably crack when boiled. I was very fond of the eggs, cooked any way, though my two messmates, the officers of the 'Renard,' were not. The great holes in the plain are easily accounted for. A Megapode scratches a hole and buries her egg ; a native comes along, rakes out the egg with his hands, but does not fill the hole up again. Another bird lays at the bottom of the excavation, and the native digs it out again, until at length a perfect tunnel is formed in the soft volcanic earth. The birds were not nearly so common on the Duke-of-York Islands as in Blanche Bay. The eggs are a perfect oval ; pale cinnamon-colour ; axis 3", diam. 1" 10".

NYCTICORAX CALEDONICUS (Gm.) ?

Found everywhere (L. L.).

[The Nankin Night-Heron brought by L. L. differs very considerably from New-Caledonian birds, so much so, that I should propose, if, on examination of a series of specimens, the variation proves constant, to separate it under another name.

The differences are as follows :—The upper parts are a clear cinnamon-red ; in *N. caledonicus* they are almost brown. The black crest does not come so far down the neck as in *N.*

caledonicus. Chin, mesial line of chest, and rest of body pure white, not stained with yellow, as in the other. Under wing-coverts pure white, not stained with cinnamon. Bill shorter, but more robust in width and depth, making a very marked feature; other measurements equal.—E. L. L.]

RALLUS PECTORALIS.

Eggs, said to be of this species, were brought to me by natives in Blanche Bay. They pointed to a bird running across the marsh in front of us, and said that that was the parent of the eggs.

[The eggs brought by L. L. as of *R. pectoralis* (a specimen of which is in the collection) are precisely similar to some eggs brought from the Bampton or Chesterfield Islands as the eggs of this bird, which the sailors and others there call a "Quail." I have little doubt from this that they are correctly identified. They are of a delicate salmon-coloured ground, blotched, chiefly at the obtuse end, with red-brown and faint purple spots, blotches, and splashes. Axis 1" 4"', diam. 13".

Besides these L. L. brings six eggs, decidedly those of a Gallinule, all brought in at the same time by a native, and evidently from one nest. They are probably those of *Porzana moluccana*, Wall., but no Gallinule was seen by any of the party. They are very pale salmon-colour, almost white, spotted and blotched throughout with red-brown and faint purple. Axis 1" 7"', diam. 14". These are from Mioko Island, Duke-of-York group.—E. L. L.]

CHARADRIUS FULVUS (Gmel.).

Common, but very difficult to get near.

ACTITIS INCANA (Gmel.).

Found in small families of four or five individuals.

TRINGOIDES HYPOLEUCUS (Temm.).

Generally solitary.

From New Britain I sailed in H.M. Corvette 'Danae' to New Hanover. None of us landed, as we had anchored off a mangrove-swamp, and Captain Ferguson, the "King of the Solomon Islands," who was showing us round, had been

attacked by the natives in that same place on his last visit there. The natives brought off a live specimen of *Carpophaga rubricera*, and a pair of *Halcyon albicilla* flew by the ship. I also saw a pair of Ducks settle in the water near the shore. With the ship's glass I could plainly see they had light-coloured heads, and belonged to a species I did not know. Thence we steamed to an anchorage in the Admiralty Islands, where a specimen of a *Carpophaga* allied to *C. vanwycki** was shot, while *Halcyon albicilla* and *Lorius hypaenochrous* flew over the ship.

From the Admiralty group the captain's intention had been to have visited Ontong Java, or Lord Howe's Archipelago, and the Abgarris or Faed Islands. Unfortunately our supply of coal got short, and my brother collectors can imagine my disappointment when I heard orders given to steer for the Solomons. I do not know of any skins having arrived in Europe from these islands. Captain Ferguson said that Orange-Cowries were quite common in the Abgarris group.

We anchored in Marau Sound, Guadalcanar Island, Solomon group, during the last week in September. As the natives had murdered one of Captain Ferguson's traders, and stolen £800 worth of goods, some seventy men were landed from the 'Danae,' at 3 A.M., and after marching some miles through the bush, managed to surround a village of the murderers at early dawn, and gave a good account of them. I took advantage of the opportunity, and landed, close to the ship, in company with a Captain MacDonald, an old Fijian acquaintance I had fallen in with anchored in Marau Sound. He took three of his natives with him, all armed with rifles, and we had our guns and a revolver apiece. Though we could distinctly hear the reports of the "Martini-Henrys" round the village, we were not molested by any of the fugitive natives, and I was enabled to add to my small collection the following species :—

HERMOTIMIA MELANOCEPHALA.

Feeding on *Hibiscus*-blossoms.

* [No doubt *C. rhodinolæma*, Sel, P. Z. S. 1877, p. 555.—EDD.]

CACATUA DUCORPSI.

Feeding on the fruits of old mangrove-trees some distance up an inland arm of the sea.

EOS CARDINALIS.

Also in the old mangrove-trees. This bird is very tough-skinned, and will fly away after receiving a heavy charge of shot.

TRICHOGLOSSUS MASSENÆ.

Same locality as *Eos cardinalis*.

PTILOPUS GEELVINKIANUS (Schleg.) ?

At least we imagine it to be so, from the lovely claret-coloured throat. I heard a Dove cooing, and after some hunting, saw the bird sitting on a bare branch. I fired, and, to my great delight, down came the pair.

CARPOPHAGA, sp. inc.

Unknown to us; has a red knob on the bill.

[This is, no doubt, *C. rufigula*, Salvad. (see Ibis, 1880, p. 131).—EDD.]

BUCEROS RUFICOLLIS.

I saw this bird, but did not procure it. Captain MacDonald sent us a skin from this locality two years ago.

While hunting about among the mangroves, I heard the loud note of a bird that sounded very like a *Tanysiptera*. Mentioning the circumstance on board Captain Ferguson's steamer, the master of a trading-vessel in at the time told me it *was* a *Tanysiptera*, and that he himself had shot them in the identical place. He added, "I ought to know the bird, for I was captain of the missionary steam-launch on the coast of New Guinea for five months with D'Albertis on board, and he brought birds off and skinned them often enough."

I have some more birds from Blanche Bay that I cannot quite identify.

First. A large blackish-brown Hawk, of which both the larger wing- and tail-feathers are crossed with broad yellowish-white bars. It had all the habits of a Harrier.

Second. *Sauloprocta tricolor*, I fancy. The only specimen seen by any of us during the trip I shot in a dense thicket in Blanche Bay.

Third. *Sauloprocta* —? This bird is probably well known, as I saw skins among Mr. Brown's duplicates; but our 'Zoological Proceedings' not having reached us for three quarters of a year, we cannot identify it. It appears to be found only on Palakura and the other little "Pigeon island," the two outer islands of the Duke-of-York group, in company with *Pachycephala melanura*. Mr. Brown claims to have purchased these two islands from the natives.

Fourth. *Malurus* —? A species much resembling our old friend *Malurus* (*Drymæca*) *africanus* of the Cape of Good Hope, with the same decomposed pointed feathers in the long tail. Head rufous, faintly striped with dark brown; back rufous-brown, with a black centre to each feather. Underparts brown on the sides, and white from the chin down the centre to the vent. It is only found in the long dense grass round the shores of Blanche Bay. It makes one short flight, and without a dog I found it absolutely impossible to flush a second time. The way I procured my specimens (a pair only) was by waiting patiently and taking a flying shot*.

Fifth. *Dicaeum* —? A minute species, of which the female only was procured. Above dark grey, rump crimson; beneath, throat, chest, centre of belly, and vent isabelline white; flanks yellowish olive. Shot in Blanche Bay, in a thicket overgrown with creepers on the sea-shore. The male has a red spot on the breast, not a band, as figured in the P. Z. S. 1877, pl. xiv., as occurring in *D. eximium*. It was obtained by Lieut. Richards.

Sixth. *Megapodius* —? A small Megapode, which we think may prove to be the young of *M. eremita*, occurred. It is throughout of a dark brown, more or less spotted and barred on the upper surface with a lightish red-brown; some of the spots on the back assume an arrow-headed or inverted Λ -like shape; below the markings are very inconspicuous

* [This is, no doubt, Selater's *Megalurus interscapularis*, P. Z. S. 1880, p. 65, pl. vi., sent home by Mr. Brown.—EDD.]

and almost obsolete. Length $5\frac{1}{2}$ to 6 inches, wing $3\frac{1}{2}$; tail a mere "fluff" of feathers; nails very long and sharp-pointed. The natives call this bird by a different name to that they give the large Megapode, and look upon it as a distinct bird.

From Marau Sound we proceeded to Sydney, passing within 150 miles of Noumea. I spent a short time there, and finally reached home after eight months' absence.

XXIX.—*Note on the Rallus sulcirostris of Wallace and its Allies.* By P. L. SCLATER.

(Plate VI.)

IN consequence of some remarks kindly communicated to me by Count Salvadori in reference to my recently described *Rallus insignis* (P. Z. S. 1880, p. 66, pl. viii.), my attention has been directed to *Rallus sulcirostris* of Wallace, and I have been led to examine the typical examples of this species in the British Museum. A few short notes on this little-known Rail and its relatives may not be unacceptable to ornithologists.

Rallus sulcirostris was described by Mr. Wallace in 1862 (P. Z. S. p. 345), in his memoir on the birds of the Sula Islands, as "very near *R. celebensis*, perhaps only a variety of that species; the chin and throat are, however, generally black, or but slightly irrorated with white; the bill is decidedly longer and less elevated in proportion at the base; the nasal furrow is longer, and the nostrils longer and linear; on the sides of the lower mandible is a furrow reaching half the length of the bill."

Schlegel, in 1865 (Mus. des P.-B., *Ralli*, p. 22), according to his usual practice when the Leyden Museum does not possess an example of a species, refers *Rallus sulcirostris* to *Rallus (Hypotaenidia) celebensis*, and commits the additional error of giving its locality as "Bouru," not the Sula Islands.

The species does not appear to be again mentioned until 1875, when Count Salvadori, in his article upon Beccari's and